



## SEQUENCE LISTING

<110> GALZI, JEAN-LUC  
ALIX, PHILIPPE

<120> USE OF A FLUORESCENT PROTEIN FOR DETECTING INTERACTION  
BETWEEN A TARGET PROTEIN AND ITS LIGAND

<130>

<140>

<141>

<150> PCT/FR98/01136

<151> 1998-06-04

<150> FR 97/06977

<151> 1997-06-05

<160> 25

<170> PatentIn Ver. 2.1

<210> 1

<211> 798

<212> DNA

<213> Aequorea Victoria

<220>

<221> CDS

<222> (1)..(795)

<400> 1

atg	gtg	agc	aag	ggc	gag	gag	ctg	ttc	acc	ggg	gtg	gtg	ccc	atc	ctg	48
Met	Val	Ser	Lys	Gly	Glu	Glu	Leu	Phe	Thr	Gly	Val	Val	Pro	Ile	Leu	
1				5					10					15		

gtc	gag	ctg	gac	ggc	gac	gta	aac	ggc	cac	aag	ttc	agc	gtg	tcc	ggc	96
Val	Glu	Leu	Asp	Gly	Asp	Val	Asn	Gly	His	Lys	Phe	Ser	Val	Ser	Gly	
			20					25					30			

gag	ggc	gag	ggc	gat	gcc	acc	tac	ggc	aag	ctg	acc	ctg	aag	ttc	atc	144
Glu	Gly	Glu	Gly	Asp	Ala	Thr	Tyr	Gly	Lys	Leu	Thr	Leu	Lys	Phe	Ile	
			35				40						45			

tgc	acc	acc	ggc	aag	ctg	ccc	gtg	ccc	tgg	ccc	acc	ctc	gtg	acc	acc	192
Cys	Thr	Thr	Gly	Lys	Leu	Pro	Val	Pro	Trp	Pro	Thr	Leu	Val	Thr	Thr	
	50					55					60					

ctg	acc	tac	ggc	gtg	cag	tgc	ttc	agc	cgc	tac	ccc	aac	cac	atg	aag	240
Leu	Thr	Tyr	Gly	Val	Gln	Cys	Phe	Ser	Arg	Tyr	Pro	Asp	His	Met	Lys	
	65				70					75					80	

cag	cac	gac	ttc	ttc	aag	tcc	gcc	atg	ccc	gaa	ggc	tac	gtc	cag	gag	288
Gln	His	Asp	Phe	Phe	Lys	Ser	Ala	Met	Pro	Glu	Gly	Tyr	Val	Gln	Glu	
				85					90					95		

cgc acc atc ttc ttc aag gac gac ggc aac tac aag acc cgc gcc gag 336  
 Arg Thr Ile Phe Phe Lys Asp Asp Gly Asn Tyr Lys Thr Arg Ala Glu  
 100 105 110  
 gtg aag ttc gag ggc gac acc ctg gtg aac cgc atc gag ctg aag ggc 384  
 Val Lys Phe Glu Gly Asp Thr Leu Val Asn Arg Ile Glu Leu Lys Gly  
 115 120 125  
 atc gac ttc aag gag gac ggc aac atc ctg ggg cac aag ctg gag tac 432  
 Ile Asp Phe Lys Glu Asp Gly Asn Ile Leu Gly His Lys Leu Glu Tyr  
 130 135 140  
 aac tac aac agc cac aac gtc tat atc atg gcc gac aag cag aag aac 480  
 Asn Tyr Asn Ser His Asn Val Tyr Ile Met Ala Asp Lys Gln Lys Asn  
 145 150 155 160  
 ggc atc aag gtg aac ttc aag atc cgc cac aac atc gag gac ggc agc 528  
 Gly Ile Lys Val Asn Phe Lys Ile Arg His Asn Ile Glu Asp Gly Ser  
 165 170 175  
 gtg cag ctc gcc gac cac tac cag cag aac acc ccc atc ggc gac ggc 576  
 Val Gln Leu Ala Asp His Tyr Gln Gln Asn Thr Pro Ile Gly Asp Gly  
 180 185 190  
 ccc gtg ctg ctg ccc gac aac cac tac ctg agc acc cag tcc gcc ctg 624  
 Pro Val Leu Leu Pro Asp Asn His Tyr Leu Ser Thr Gln Ser Ala Leu  
 195 200 205  
 agc aaa gac ccc aac gag aag cgc gat cac atg gtc ctg ctg gag ttc 672  
 Ser Lys Asp Pro Asn Glu Lys Arg Asp His Met Val Leu Leu Glu Phe  
 210 215 220  
 gtg acc gcc gcc ggg atc act ctc ggc atg gac gag ctg tac aag tac 720  
 Val Thr Ala Ala Gly Ile Thr Leu Gly Met Asp Glu Leu Tyr Lys Tyr  
 225 230 235 240  
 tca gat ctc gag ctc aag ctt cga att ctg cag tcg acg gta ccg cgg 768  
 Ser Asp Leu Glu Leu Lys Leu Arg Ile Leu Gln Ser Thr Val Pro Arg  
 245 250 255  
 gcc cgg gat cca ccg gat cta gat aac tga 798  
 Ala Arg Asp Pro Pro Asp Leu Asp Asn  
 260 265

<210> 2  
 <211> 265  
 <212> PRT  
 <213> Aequorea victoria

<400> 2  
 Met Val Ser Lys Gly Glu Glu Leu Phe Thr Gly Val Val Pro Ile Leu  
 1 5 10 15  
 Val Glu Leu Asp Gly Asp Val Asn Gly His Lys Phe Ser Val Ser Gly  
 20 25 30

Glu Gly Glu Gly Asp Ala Thr Tyr Gly Lys Leu Thr Leu Lys Phe Ile  
           35                                  40                                  45  
 Cys Thr Thr Gly Lys Leu Pro Val Pro Trp Pro Thr Leu Val Thr Thr  
           50                                  55                                  60  
 Leu Thr Tyr Gly Val Gln Cys Phe Ser Arg Tyr Pro Asp His Met Lys  
           65                                  70                                  75                                  80  
 Gln His Asp Phe Phe Lys Ser Ala Met Pro Glu Gly Tyr Val Gln Glu  
                                   85                                  90                                  95  
 Arg Thr Ile Phe Phe Lys Asp Asp Gly Asn Tyr Lys Thr Arg Ala Glu  
                                   100                                  105                                  110  
 Val Lys Phe Glu Gly Asp Thr Leu Val Asn Arg Ile Glu Leu Lys Gly  
           115                                  120                                  125  
 Ile Asp Phe Lys Glu Asp Gly Asn Ile Leu Gly His Lys Leu Glu Tyr  
           130                                  135                                  140  
 Asn Tyr Asn Ser His Asn Val Tyr Ile Met Ala Asp Lys Gln Lys Asn  
           145                                  150                                  155                                  160  
 Gly Ile Lys Val Asn Phe Lys Ile Arg His Asn Ile Glu Asp Gly Ser  
                                   165                                  170                                  175  
 Val Gln Leu Ala Asp His Tyr Gln Gln Asn Thr Pro Ile Gly Asp Gly  
                                   180                                  185                                  190  
 Pro Val Leu Leu Pro Asp Asn His Tyr Leu Ser Thr Gln Ser Ala Leu  
           195                                  200                                  205  
 Ser Lys Asp Pro Asn Glu Lys Arg Asp His Met Val Leu Leu Glu Phe  
           210                                  215                                  220  
 Val Thr Ala Ala Gly Ile Thr Leu Gly Met Asp Glu Leu Tyr Lys Tyr  
           225                                  230                                  235                                  240  
 Ser Asp Leu Glu Leu Lys Leu Arg Ile Leu Gln Ser Thr Val Pro Arg  
                                   245                                  250                                  255  
 Ala Arg Asp Pro Pro Asp Leu Asp Asn  
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<210> 3

<211> 5

<212> PRT

<213> Artificial Sequence

<220>

<223> Description of Artificial Sequence: spacer sequence

<400> 3

Gly Gly Gly Gly Ser  
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<210> 4  
 <211> 6  
 <212> PRT  
 <213> Artificial Sequence

<220>  
 <223> Description of Artificial Sequence: Cyclopeptide

<400> 4  
 Gln Trp Phe Gly Leu Met  
 1 5

<210> 5  
 <211> 29  
 <212> DNA  
 <213> Artificial Sequence

<220>  
 <223> Description of Artificial Sequence:  
 Oligonucleotide

<400> 5  
 ggtcgccacc ctgtacaaga agggcgagg

29

<210> 6  
 <211> 36  
 <212> DNA  
 <213> Artificial Sequence

<220>  
 <223> Description of Artificial Sequence:  
 Oligonucleotide

<400> 6  
 cagcagagga tgtacaacct cgagcgaca gtcacc

36

<210> 7  
 <211> 44  
 <212> DNA  
 <213> Artificial Sequence

<220>  
 <223> Description of Artificial Sequence:  
 Oligonucleotide

<400> 7  
 gtacccagac accagctagc agatctgaag cttcgccatc aggc

44

<210> 8  
 <211> 39  
 <212> DNA  
 <213> Artificial Sequence

<220>  
 <223> Description of Artificial Sequence: Primer  
  
 <400> 8  
 ggagagttcc aactcgagaa aagaaagaag ggcgaggag 39  
  
 <210> 9  
 <211> 36  
 <212> DNA  
 <213> Artificial Sequence  
  
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 <223> Description of Artificial Sequence: Primer  
  
 <400> 9  
 gtcagctggtt tctgcggcgc gctaagcctg ggcctt 36  
  
 <210> 10  
 <211> 51  
 <212> DNA  
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 <223> Description of Artificial Sequence: Primer  
  
 <400> 10  
 ttagttctaa actagcggcc gcactagtcc tccatgaaca cttcagcccc a 51  
  
 <210> 11  
 <211> 42  
 <212> DNA  
 <213> Artificial Sequence  
  
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 <223> Description of Artificial Sequence: Primer  
  
 <400> 11  
 cttgaaccta tagctagcct cgagtcagca ttggcgggag gg 42  
  
 <210> 12  
 <211> 28  
 <212> DNA  
 <213> Artificial Sequence  
  
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 <223> Description of Artificial Sequence: Primer  
  
 <400> 12  
 cctgctgtct cagatctcat caccgtcc 28  
  
 <210> 13  
 <211> 47

<212> DNA  
 <213> Artificial Sequence

<220>  
 <223> Description of Artificial Sequence:  
 Oligonucleotide

<400> 13  
 cagatcatta gttgtacagg aaagatcttg aggatcctgg agtgaag

47

<210> 14  
 <211> 29  
 <212> DNA  
 <213> Artificial Sequence

<220>  
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 Oligonucleotide

<400> 14  
 ggcccaagct tatgtcagga tccggggat

29

<210> 15  
 <211> 30  
 <212> DNA  
 <213> Artificial Sequence

<220>  
 <223> Description of Artificial Sequence:  
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<400> 15  
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30

<210> 16  
 <211> 21  
 <212> DNA  
 <213> Artificial Sequence

<220>  
 <223> Description of Artificial Sequence:  
 Oligonucleotide

<400> 16  
 gttgacaagc ttcgggatcc a

21

<210> 17  
 <211> 78  
 <212> DNA  
 <213> Artificial Sequence

<220>  
 <223> Description of Artificial Sequence:  
 Oligonucleotide

<400> 17  
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 atcccgaagc ttatcaac 78

<210> 18  
 <211> 78  
 <212> DNA  
 <213> Artificial Sequence

<220>  
 <223> Description of Artificial Sequence:  
 Oligonucleotide

<400> 18  
 attgctactg ccctctgtgc tcctgcatct gcctcccat attcctcgga caccacacca 60  
 tgctgcttcg cctacatt 78

<210> 19  
 <211> 78  
 <212> DNA  
 <213> Artificial Sequence

<220>  
 <223> Description of Artificial Sequence:  
 Oligonucleotide

<400> 19  
 gcacttgcca ctggtgtaga aatactcctt gatgtgggca caaggcagtg ggcgggcaat 60  
 gtaggcgaag cagcatgg 78

<210> 20  
 <211> 78  
 <212> DNA  
 <213> Artificial Sequence

<220>  
 <223> Description of Artificial Sequence:  
 Oligonucleotide

<400> 20  
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 gtaggcaaag cagcatgg 78

<210> 21  
 <211> 69  
 <212> DNA  
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<220>  
 <223> Description of Artificial Sequence:  
 Oligonucleotide

<400> 21

ctagctcacc tccagcgagt tggatgtactc ccgaacccat ttcttctctg gggtggcaca 60  
aacttgacg 69

<210> 22  
<211> 50  
<212> DNA  
<213> Artificial Sequence

<220>  
<223> Description of Artificial Sequence:  
Oligonucleotide

<400> 22  
aactcgctgg agatgagcta ggcggccgct cgaggctcgac ctagtcacta 50

<210> 23  
<211> 21  
<212> DNA  
<213> Artificial Sequence

<220>  
<223> Description of Artificial Sequence:  
Oligonucleotide

<400> 23  
tagtgactag gtcgacctcg a 21

<210> 24  
<211> 41  
<212> DNA  
<213> Artificial Sequence

<220>  
<223> Description of Artificial Sequence:  
Oligonucleotide

<400> 24  
gcggccgcat gggggatcct actctggagt ccatcatggc g 41

<210> 25  
<211> 43  
<212> DNA  
<213> Artificial Sequence

<220>  
<223> Description of Artificial Sequence:  
Oligonucleotide

<400> 25  
ccgctcgagt taatctagaa ggaccaaatt gtactccttc aag 43